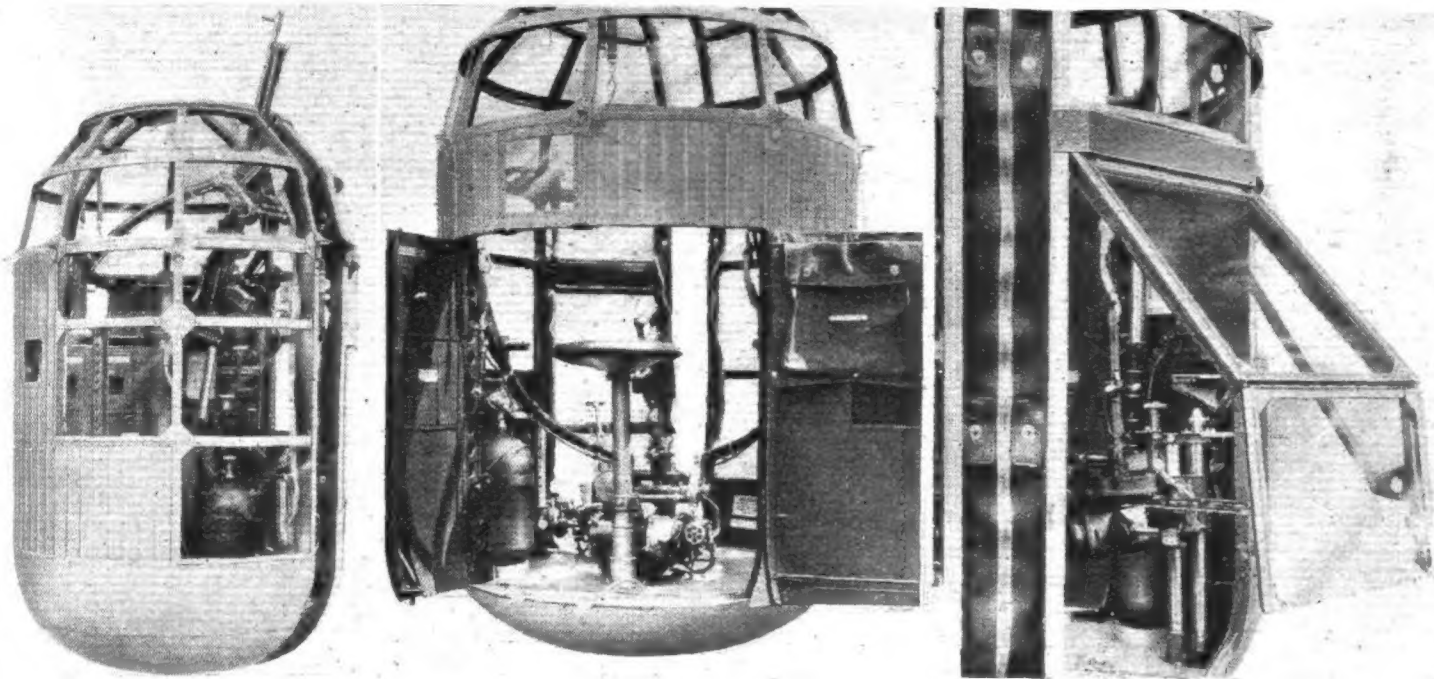


THE INDUSTRY

Military Aircraft Manufacture in Australia : Anodising Explained : Asbestos Cement : Investment Trust Distribution : New Light on Aluminium



ALMOST THE WHOLE WORKS: Three interesting detail photographs of the Boulton Paul power-operated gun turret, a description of which appears on page 414a. From left to right these views show the gun at high elevation and the complete turret with its quickly releasable dome; the rear of the turret with doors leading from the fuselage and the gear box with hand-turning mechanism on the floor; and the bomb sight with its special window.

Australian Aircraft Factory

THE formation of a £1,000,000 company for the manufacture of military aircraft and engines is announced. The factory will probably be in Melbourne. The whole of the £600,000 of issued capital has been taken up by Broken Hill Proprietary Associated Smelters, Imperial Chemical Industries of Australia, General Motors, and Holdens, the biggest motor-body makers in Australia.

Comment on this news appears on page 403.

Exactor Controls in U.S.A.

IT is announced that the Exactor Control Co., Ltd., of Dorland House, Lower Regent Street, London, S.W.1, has concluded a manufacturing licence agreement with Sperry Products, Inc., of New York, for the production of the Exactor hydraulic remote control. Mr. Farwell, president of the Sperry Company, was in England last week, and informed the Exactor Company that he hoped to be in full production shortly; orders had already been received for the control from aircraft manufacturers in the United States.

Anodising—What It Is

THE HAWKER AIRCRAFT CO. has ordered from Airwork, Ltd., a considerable number of fuel tanks for the new Hurricane monoplane type. The tank shop and anodic plant are already working at high speed on orders for the Avro Anson and, recently, the Avro 626. Part of the former service hangar has been set aside for tank manufacture, and the whole of the ground-space will gradually be absorbed when the Hawker orders necessitate increased production.

The work done by the anodic plant is worthy of special mention, for Airwork claims that it is probably the only firm of its type able to apply this highly specialised form of electrical protective treatment, and thus carry out the entire process of manufacture and finishing on the premises. Each tank is immersed for an hour in a bath containing chromic acid, which, by the passage of an electrical current, is caused to eat its way into the interior and exterior surfaces of the tank, thereby liberating certain gases and rendering the aluminium proof

against corrosion. The tank enters the bath with the appearance of raw metal, and emerges with a grey "matt" finish of extreme hardness, which affords the required protection, and forms a good base for the final coat of paint.

The anodised finish is a non-conductor of electricity, and any flaw may subsequently be revealed by placing small steel balls on various portions of the surface and applying an electric current.

Manual labour is confined to the immersion of the tank, control of the rheostat governing the supply of current, and the periodic renewal of the acid in the bath. Anodising is not universal in the manufacture of aircraft tanks, but it is general practice in connection with aluminium parts for service aircraft and in any cases where high-grade workmanship is required.

Finishes for Metal

"NULAC" synthetic resin finishes for metal aircraft form the subject of a leaflet issued by the makers, Robert Kearsley and Co., of Ripon, Yorkshire, whose products have been associated with road and rail transport since 1837. It is claimed that "Nulac" finish gives extremely high resistance to dirt, petrol, oil, moisture, extremes of heat and cold, and acid- or alkali-laden atmospheres, and that the glossy surface obtainable is of an extremely high order.

About Asbestos Cement

ASBESTOS cement in its application to aircraft buildings of all kinds forms the subject of a beautifully produced catalogue recently issued by Turner's Asbestos Cement Co., of Trafford Park, Manchester, 17, and Asbestos House, Southwark Street, London, S.E.1.

Asbestos cement is a remarkable product offering the manifold advantages of both its constituents and, it would appear, none of their disadvantages. It is stated that the asbestos fibres act in the same way as the steel reinforcements used in ferro-concrete structures, but the compound possesses the advantage that it is more resilient. It has been proved to possess amazing durability and great resistance to transverse mechanical and tensile strains, and these qualities actually improve with age.

[Cont. overleaf]